DRAFT

GOVERNMENT OF
PRINCE EDWARD ISLAND

P.E.I. / LITTON PROJECT

A report from

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Management Consultants

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P.E.I./LITTON PROJECT

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SUMMARY AND CONCLUSIONS

- We were asked to provide the Government of Prince Edward Island with an independent appreciation of the issues involved in locating a Litton Systems Canada Limited plant on the Island.

- To do this we reviewed documentation provided to us, including two previous studies, and spoke with officials from the Federal Government, Litton Systems Canada Limited, Statistics Canada and P.E.I. The following is a summary of our findings.

- The major benefits to the Island appear to be the number of people employed, the relatively high level of remuneration they will receive and the possibility of creating viable long term industrial activity.

- There may also be some additional, longer term, benefits resulting from the Litton plant. However, these will not likely be large and it is not possible to quantify them with any degree of precision.

- THE OVERALL BENEFIT TO THE ISLAND WILL CLEARLY DEPEND UPON WHAT IS ACTUALLY NEGOTIATED WITH LITTON SYSTEMS CANADA.

- WE FEEL THAT THE SIZE OF THE PLANT AND THE CURRENT ABILITIES OF ISLAND FIRMS TO PROVIDE NECESSARY GOODS AND SERVICES ARE SUCH THAT THERE WILL NOT BE A LOT OF SPIN-OFF ACTIVITY--AT LEAST IN THE NEAR FUTURE. THUS, BETWEEN 80% AND 85% OF THE SHORT TERM BENEFITS WILL COME FROM THE WAGES RECEIVED AND THE SPENDING OF THOSE WAGES.

- WHEN THE PLANT BEGINS PRODUCTION, IT WILL EMPLOY ABOUT 100 PEOPLE. THIS WILL INCREASE EACH YEAR AND LITTON IS PREPARED TO COMMIT TO EMPLOYING AT LEAST 245 PEOPLE BY THE END OF THE THIRD YEAR OF OPERATIONS AND 345 PEOPLE BY THE END OF THE FIFTH.

- ON AVERAGE, OVER THE FIRST FIVE YEARS FROM START OF CONSTRUCTION THERE WILL BE ABOUT 200 PEOPLE EMPLOYED AT THE PLANT. ON AVERAGE, ABOUT 100 PEOPLE WILL BE WORKING AS A RESULT OF PURCHASES BOTH BY EMPLOYEES SPENDING THEIR SALARIES AND BY THE PLANT ITSELF.

- OUR UNDERSTANDING IS THAT THE ISLAND WAS EXPECTING TO

HAVE ABOUT 245 DIRECT JOBS CREATED FROM THE OUTSET AND THAT THIS WOULD SUPPORT A FURTHER 427 JOBS ON THE ISLAND, FOR A TOTAL OF 672 JOBS. OUR COMPARABLE ESTIMATES FOR TOTAL JOB CREATION IS 300. THE DIFFERENCE IS DUE PRINCIPALLY TO THE FACT THAT THE PLANT WOULD SPEND SIGNIFICANTLY LESS ON THE ISLAND THAN INITIALLY ASSUMED.

. FOR THE SAME REASONS, WE FOUND THAT, WHEN THE PLANT REACHES 345 EMPLOYEES AFTER FIVE YEARS, AN ADDITIONAL 161 JOBS WILL BE CREATED TO BRING THE TOTAL TO 506 JOBS CREATED ON A PER YEAR BASIS. THIS ESTIMATE IS ONLY ABOUT 60% OF THE 832 ESTIMATES THAT YOU ARE CURRENTLY USING.

. WHILE THESE ESTIMATES HAVE BEEN PREPARED WITH THE BEST INFORMATION FROM LITTON AND PUBLISHED BY STATISTICS CANADA, THEY ARE, OF NECESSITY, APPROXIMATE. IN ADDITION, STATISTICS CANADA DATA PERTAINING TO P.E.I. IS LESS ACCURATE THAN ITS DATA FOR THE MORE POPULOUS AND INDUSTRIALIZED PARTS OF CANADA. THIS ADDS AN ADDITIONAL ELEMENT OF UNCERTAINTY TO THE CALCULATIONS, IN PARTICULAR, THE ESTIMATES OF SERVICE-SECTOR SPIN-OFFS.

. MANY TYPES OF PEOPLE WILL BE EMPLOYED BUT MAJOR CATEGORIES INCLUDE ASSEMBLY WORKERS AND VARIOUS GRADES AND

TYPES OF ENGINEERS AND TECHNOLOGISTS.

. LITTON HAS PROPOSED A COMPREHENSIVE TRAINING PROGRAM WHICH WILL GO INTO EFFECT WHILE THE PLANT IS BEING BUILT. THIS PROGRAM SHOULD ASSIST ISLANDERS TO GET MANY OF THE JOBS CREATED. HOWEVER, LITTON WILL ALSO BE MINDFUL OF THE NEED TO HAVE SOME WORKERS WHO ARE ALREADY SKILLED IN THE AREA AND SO THE FULL BENEFIT TO ISLANDERS WILL LIKELY ONLY COME OVER TIME.

. WAGE RATES WHICH LITTON EXPECTS TO PAY ARE HIGH BY ISLAND STANDARDS. AVERAGE HOURLY RATES WE HAVE BEEN GIVEN RANGE FROM ABOUT $10.00 PER HOUR TO $19.00 PER HOUR, ALTHOUGH WAGES WILL LIKELY BE SOMEWHAT LOWER UNTIL WORKERS GAIN ALL THE NECESSARY SKILLS. LITTON EXPECTS TO PAY AN AVERAGE YEARLY SALARY OF $29,104 AND, IN ADDITION, TO PROVIDE A BENEFITS PACKAGE.

. THERE ARE REASONABLY FEW OPPORTUNITIES THESE DAYS TO OBTAIN A PLANT OF THIS SIZE AND OFFERING THIS LEVEL OF EMPLOYMENT AND REMUNERATION. ON THE OTHER HAND, THE BENEFITS, WHICH COULD BE CONSIDERABLE, WILL ONLY COME AT SOME COST AND RISK AND WILL BE UNEVENLY DISTRIBUTED THROUGHOUT THE

ISLAND.

. WAGE RATES WILL LIKELY BE BID UP BECAUSE THE PLANT WILL BECOME THE LARGEST INDUSTRIAL EMPLOYER ON THE ISLAND WILL LIKELY HIRE WORKERS AWAY FROM OTHER FACILITIES AND BECAUSE LITTON INTENDS TO PAY WAGES CONSIDERABLY HIGHER THAN ARE NOW CURRENT ON THE ISLAND.

. OTHER MANUFACTURING FIRMS MAY SUFFER COMPETITIVELY FROM HAVING TO PAY HIGHER WAGE RATES. IN ORDER TO RETAIN THEIR TRAINED PEOPLE, THEY MAY FEEL CONSTRAINED TO INCREASE THEIR WAGE RATES. THIS MAY, IN TURN, HAVE ADVERSE EFFECTS ON THEIR COMPETITIVENESS. WE CANNOT QUANTIFY THESE NEGATIVE INPUTS USING INPUT-OUTPUT ANALYSIS BUT YOU SHOULD INVESTIGATE THIS WITH OTHER INDUSTRIAL FIRMS ON THE ISLAND.

. MOST OF THOSE WHO WORK AT THE PLANT WILL PROBABLY LIVE IN, OR CLOSE TO, CHARLOTTETOWN. OUR ESTIMATE IS THAT ABOUT TWO-THIRDS OF THE PEOPLE WILL LIVE IN THIS AREA. BASED ON CURRENT PRACTICE, MOST OF ALL THE REST ARE NOT LIKELY TO WANT TO COMMUTE FOR MORE THAN ONE-HALF HOUR. THUS, WE ESTIMATE THAT ABOUT 95% OF THOSE EMPLOYED IN THE PLANT WILL RESIDE IN THOSE TOWNSHIPS IN QUEENS COUNTY WHICH ARE WITHIN THIS

COMMUTING DISTANCE OF THE PROPOSED PLANT.

. THE MAJOR RISK IS THAT THE PLANT WILL NOT BECOME A VIABLE OPERATION AND WILL BE CLOSED DOWN AT SOME POINT IN THE FUTURE. THE CLOSING OF A PLANT OF THIS SIZE ON THE ISLAND WOULD CLEARLY HAVE CONSIDERABLE SOCIAL AND ECONOMIC CONSEQUENCES.

. LITTON IS PREPARED TO GUARANTEE 245 JOBS AT THE PLANT BY THE END OF YEAR THREE AND, AFTER FIVE YEARS OF OPERATION, TO MAINTAIN EMPLOYMENT LEVELS OF AT LEAST 345 PEOPLE FOR A FURTHER FIVE TO TEN YEARS. IT SEEMS TO US THAT THIS COMMITMENT AND ITS SPECIFIC PROVISIONS WILL BE EXTREMELY IMPORTANT FOR FOUR REASONS.

. THE CANADIAN GOVERNMENT ORDER IS ONLY LARGE ENOUGH TO PROVIDE FULL EMPLOYMENT TO THE PLANT FOR ABOUT ONE YEAR. THUS, ALLOWING FOR REDUCED PRODUCTION DUE TO EMPLOYMENT BUILD-UP, ONLY A TOTAL OF TWO OF THE FIRST FIVE YEARS WILL BE DEVOTED TO MEETING THE CANADIAN ORDER. THUS EXPORT ORDERS FOR THIS PLANT AND SALES OF OTHER LITTON RADAR EQUIPMENT WILL BE OF PRIME IMPORTANCE IN MAINTAINING FULL EMPLOYMENT AT THE PLANT. IT IS BY NO MEANS CERTAIN THAT THESE ORDERS WILL

MATERIALIZE.

. FUTURE EXPORT SALES MAY CARRY WITH THEM THE REQUIREMENT TO PROVIDE INDUSTRIAL OFFSETS. THIS MAY MEAN THAT SOME ADATS COMPONENTS WILL HAVE TO BE SOURCED IN THE COUNTRY OF THE BUYER. COMPONENTS PRODUCED BY THE PLANT WILL BE PARTICULARLY VULNERABLE BECAUSE THE PLANT COULD READILY BE CONSTRUCTED AND OPERATED ELSEWHERE.

. FINALLY, WHILE LITTON INTENDS TO MOVE ITS ENTIRE RADAR OPERATION TO THE ISLAND, ANNUAL SALES OF THESE PRODUCTS ARE SMALL AT THE MOMENT AND CAN ONLY BE EXPECTED TO PROVIDED A SMALL STABILIZING INFLUENCE.

. SHOULD THE ISLAND DECIDE TO WORK OUT A FINAL AGREEMENT WITH LITTON SYSTEMS FOR THE LOCATION OF A PLANT ON THE ISLAND YOU MAY WISH TO TAKE INTO ACCOUNT THE FOLLOWING FACTORS:

. WHILE THE EMPLOYMENT BENEFITS ARE STILL CONSIDERABLE, THEY APPEAR TO BE SOMEWHAT LESS THAN WAS FIRST THOUGHT.

. THE CONTENT OF THE GUARANTEE IS VERY IMPORTANT FOR THE ISLAND AND CONSIDERABLE ATTENTION SHOULD BE GIVEN TO ITS

NEGOTIATION. IT MUST GIVE LITTON THE FLEXIBILITY TO PRODUCE GOODS THAT HAVE A MARKET. AT THE SAME TIME, IT MUST SAFEGUARD OVERALL EMPLOYMENT LEVELS, THE QUALITY OF EMPLOYMENT AND ENSURE THAT LITTON CONTINUES TO SEE THE PLANT AS AN IMPORTANT AND VALUABLE PART OF ITS OVERALL OPERATIONS.

. THE $9 MILLION CONTRIBUTION FROM THE ISLAND DOES NOT SEEM TO BE AN INTEGRAL PART OF THE OVERALL COST STRUCTURE OF THE ADATS PROGRAM. THE SPECIFICATIONS CONTAINED IN THE FEDERAL GOVERNMENT REQUEST FOR PROPOSAL, CONTAINED CRITERIA WHICH WOULD INDUCE FIRMS TO LOCATE OPERATIONS IN LESS DEVELOPED ECONOMIC REGIONS IN CANADA. IT WAS NOT ENVISAGED THAT A MARITIME PROVINCE WOULD HAVE TO PAY FOR THESE BENEFITS. FURTHER, WHEN LITTON ASKED THE MARITIME PROVINCES FOR PROPOSALS, THEY WERE NOT EXPECTING A CASH INVESTMENT.

. THUS, THE $9 MILLION FIGURE SEEMS TO HAVE RESULTED FROM AN UNPLANNED 'BIDDING WAR' AMONG THE MARITIME PROVINCES. IT HAS RESULTED IN THE SOMEWHAT UNFORTUNATE SITUATION WHEREBY P.E.I. WILL NOW BE PAYING TO RECEIVE BENEFITS WHICH THE FEDERAL GOVERNMENT ASSUMED IT WOULD GET AT NO COST.

. IN ADDITION TO THE MONETARY OFFER, LITTON TOLD US THAT

THEY WANTED TO LOCATE ON THE ISLAND FOR TWO REASONS. THE FIRST WAS THE WHOLEHEARTED SUPPORT FOR THE PLANT WHICH THE GOVERNMENT OF PRINCE EDWARD ISLAND HAD SHOWN. SECOND, THEIR RESEARCH SHOWED THAT BOTH THE WORK ETHIC AND PRODUCTIVITY OF ISLANDERS WERE COMPATIBLE WITH LITTON'S EXPECTATIONS.

. ULTIMATELY, THE LONG TERM VIABILITY OF THE PLANT WILL DEPEND ON WHETHER THIS PLANT CAN PRODUCE A NUMBER OF QUALITY PRODUCTS AT COMPETITIVE PRICES.

. THUS ANY AGREEMENT SHOULD ENSURE CLOSE COOPERATION BETWEEN LITTON, THE GOVERNMENT OF PRINCE EDWARD ISLAND AND OTHER ISLAND INSTITUTIONS TO MAKE THIS PLANT AN INTEGRAL, PROFITABLE AND IMPORTANT PART OF THE OVERALL LITTON OPERATION.

BACKGROUND

In fulfillment of part of its NATO commitment, the Department of National Defence (DND) initiated a Low Level Air Defence Program (LLAD) in 1982. Its purpose was to provide for the protection of Canadian airfields and brigade groups stationed in Europe.

In 1984, DND asked a number of companies to submit their proposals for systems which would provide this protection. Seven firms responded with their ideas on how this should be done. Three firms were chosen from the initial seven to provide more detailed proposals for this $605 million project.

The Federal Government subsequently announced that a group comprised of Oerlikon-Buhrle of Switzerland and Litton Systems Canada Limited had become the final contender. Contract discussions are now in progress and the final agreement may be signed late in June 1986.

THE MAIN ELEMENT IN THE LLAD SYSTEM PROPOSED BY LITTON-OERLIKON IS THE ADATS (AIR DEFENCE ANTI-TANK SYSTEM) MISSILE SYSTEM. THIS SYSTEM OPERATES AGAINST ATTACKING AIRCRAFT, HELICOPTERS AND TANKS.

INCLUDED IN THE FEDERAL GOVERNMENT'S REQUEST FOR PROPOSALS WERE SOCIO-ECONOMIC BENEFIT REQUIREMENTS DESIGNED TO INDUCE THE BIDDERS TO LOCATE PRODUCTION OPERATIONS IN LESS INDUSTRIALLY DEVELOPED REGIONS OF CANADA. THE LITTON-OERLIKON PROPOSAL RESPONDED TO THIS BY INCLUDING A COMMITMENT TO CONSTRUCT A FACILITY IN THE MARITIMES THAT WOULD EVENTUALLY EMPLOY 345 PEOPLE.

PROPOSALS FROM MARITIME PROVINCES WERE REQUESTED BY LITTON. PRINCE EDWARD ISLAND MADE ITS PROPOSAL ON THE BASIS OF ITS ANALYSIS OF THE BENEFITS IT WOULD RECEIVE.

In the end, a ten acre site in West Royalty Industrial Park in Prince Edward Island was chosen by Litton Systems. Once the contract is awarded by the Federal Government, Litton intends to finalize its agreement to build and operate a facility in Prince Edward Island.

YOUR REQUIREMENTS

During the election campaign, the Honourable Joseph A. Ghiz, Premier of Prince Edward Island, promised to have a second look at the arrangement which was being discussed by Prince Edward Island and Litton. Before reaching a final decision on how to proceed with the negotiations, the Premier wished to take into account any information which may not have been available earlier and identify clearly the major benefits which would accrue to the Island -- as well as the major risks inherent in the proposal.

To assist in this evaluation, the Premier asked Woods Gordon to do two things. First, to provide him with an independent view of what benefits the Island would likely receive. Second, to identify the major issues for the Island connected with this potential opportunity.

THE WOODS GORDON APPROACH

Our work was directed towards identifying major issues which must be considered in evaluating the costs and benefits of any decision by Prince Edward Island to support the location of the Litton Systems plant on the Island. And our findings are grouped in this way. Included in these issues is our appreciation of the benefits the Island can hope to receive as well as the costs and risks associated with the project.

We have spoken with most of the parties involved, including the Province, Federal officials at both the Department of National Defence and the Department of Regional and Industrial Expansion and Litton Systems. Also, we have contacted the writers of a previous Coopers and Lybrand study to get the benefit of their work.

Our work has concentrated on examining the assumptions used in previous analyses and on re-estimating results where necessary. We have not attempted to replicate the exact methodology by Coopers and Lybrand, but have used Statistics Canada input-output information relevant to the Island. We have, however, checked the consistency of both approaches.

Finally, as agreed, we did not re-estimate the effect of the plant on the Province's equalization entitlements.

We have received considerable help from all parties and would like to mention assistance we received from Mr. Bud Maclean of Litton Systems, Mrs. Christine Lucyk of Coopers and Lybrand and Ms. Carol Mayne and her staff from your Department of Industry.

OUR FINDINGS

Plant Jobs

We have been told by Litton that their commitment to the Island is to provide 245 jobs at the plant by the end of year three, rising to 345 jobs by the end of year five. Further, they are prepared to commit themselves to maintaining this final level of employment for between five and ten years. It should be emphasized here that this is a minimum and that, should sufficient orders materialize, employment at the plant could be increased. Our analysis has, however, focussed on the committed figures.

We were told that the first 245 jobs will be dedicated to the manufacture of part of the ADATS (Air Defence Anti-Tank System). The 100 jobs to be created at the plant in years four and five will result, in part, from the transfer of the production of the latest Litton Airborne Radar product line to the plant and from the bringing in of research and development personnel.

Phasing-in Period

Construction of the plant should employ some 86 people and should take about one year. Litton has told us that about 53 people will be hired over this year and will go on training programs. Of this group, one-half will be trained on the Island. We have defined this as the first year of operations.

EMPLOYMENT DURING THE SECOND YEAR OF THE PLANT'S OPERATION SHOULD AVERAGE ABOUT 100 PEOPLE. THIS IS FORECAST TO RISE STEADILY TO A PEAK EMPLOYMENT OF 345 PEOPLE BY THE END OF THE FIFTH YEAR OF OPERATIONS.

THUS, THE AVERAGE NUMBER OF PEOPLE EMPLOYED DURING THE FIRST FIVE YEARS WOULD BE JUST UNDER 200 PEOPLE. THEREAFTER, THE PLANT WILL REACH EMPLOYMENT OF 345 PEOPLE FOR A YET TO BE AGREED PERIOD OF TIME, BUT CURRENTLY ESTIMATED TO BE BETWEEN FIVE AND TEN YEARS. THESE FIGURES ARE SHOWN IN TABLE 1.

WE UNDERSTAND THAT ESTIMATES CONTAINED IN YOUR BRIEFING DOCUMENTATION DATED MAY 2, 1986, SUGGEST THAT DURING THE "START-UP" OPERATIONAL PHASE, THE PLANT WILL PROVIDE 245 JOBS DIRECTLY. OUR DISCUSSIONS WITH LITTON DO INDICATE A COMMITMENT TO PROVIDE 245 JOBS BY THE END OF YEAR THREE. HOWEVER, INITIALLY THEY PLAN THAT EMPLOYMENT WILL BE MUCH LOWER, GRADUALLY INCREASING TO THE TWO TARGETED FIGURES.

TABLE 1

EMPLOYMENT ESTIMATES

JOB DESCRIPTION:	YEAR 1	2	3	4	5	6
			(Workers)			
Assembly	11	16	32	44	52	56
Test and Buy Off	4	5	10	14	17	18
Quality Assurance	2	3	6	9	10	11
Manufacturing Engineers	2	3	6	9	10	11
Sustaining Engineers	2	2	5	6	7	8
Assembly Test and Rework Support	1	2	3	5	6	6
Quality Engineers	1	1	1	2	2	2
Final Inspectors		1	2	2	3	3
Receiving Inspectors	3	6	11	15	18	19
Machine Shop		2	3	5	6	6
Repair and Overhaul		3	6	8	9	10
Cafeteria		2	5	6	7	8
Program Development Engineers		29	57	78	93	100
Supplier Quality Engineers		1	2	3	4	4
Indirect Support Personel:		19	37	51	60	65
Maintenance Traces						
Janitors						
Drivers						
Security						
Communications						
Marketing						
Program Management						
Finance						
Secretarial						
Training						
Health and Safety						
Other						
Canadian Forces		3	6	8	9	10
Sub-Contract Reps		2	5	6	7	8
Construction	86					
Total Direct Employment	**112**	**100**	**197**	**271**	**320**	**345**

Male and Female Employment

The nature of the electrical assembly work required at the plant is similar to that at other Litton operations. In Litton's experience, women have proven to be very good at this work and Litton expects that at least as many women will be working at the plant as will men. We note that this ratio is quite different from that currently prevailing in the manufacturing sector. For example, at the West Royalty Industrial Park, we understand that the ratio of men to women employed is in the order of three to one.

Table 2

LITTON SYSTEMS CANADA LTD.
LABOUR RATES
(based on 40 hr work week)

		EST. NO. OF EMPLOYEES	WITHOUT BENEFITS (Cdn $)	WITH BENEFITS (Cdn $)	PER ANNUM
1.	Assembly -Mach & Elec Tech	56	$10.84	$13.01	$22,547
2.	Test & Buy Off -Test Technicians	18	13.81	16.57	28,725
3.	Quality Assurance	11	11.41	13.69	23,733
4.	Manuf. Engineers	11	17.12	20.54	35,610
5.	Sustaining Engineers	8	18.94	22.73	39,395
6.	Assembly, Test & Rework Support	6	11.78	14.14	24,502
7.	Quality Engineering	2	15.49	18.59	32,219
8.	Final Inspectors	3	13.81	16.57	28,725
9.	Receiving Insp.	19	13.81	16.57	28,725
10.	Supplier Quality Engineering	4	17.26	20.71	35,900
	DIRECT TOTAL	138			
11.	Engineers (Radar Program Develop) (Technologists)	100	17.26	20.71	35,900
12.	Indirect Support Personnel -Maintenance Traces/ Janitors/Divers/ Security/Communications/ marketing/program mgt. finance/secretarial/ training/health & safety/etc.	65	13.64	16.37	28,371
13.	Canadian Forces	10	n/a	n/a	n/a
14.	Subcontractor Reps	8	17.39	20.87	36,171
15.	Machining Shop (contract or in-house)	6	11.84	14.21	24,626
16.	Repair & Overhaul Technicians	10	12.64	15.17	26,291
17.	Cafeteria Staff	8	n/a	n/a	n/a
		345			

Source: Litton Systems

TYPES OF JOBS

LITTON WILL REQUIRE A VARIETY OF SKILLS AT THE PLANT. THEY HAVE PROVIDED US WITH A LIST OF TWENTY-FIVE JOB CATEGORIES TOGETHER WITH THE NUMBER OF PEOPLE THEY WILL EVENTUALLY REQUIRE IN EACH (SEE TABLE 2). THE MAJOR CATEGORIES ARE ASSEMBLY WORKERS (56), TECHNICIANS (18) AND VARIOUS CATEGORIES OF ENGINEERS AND TECHNOLOGISTS (136). MANY OF THE FUNCTIONS TO BE PERFORMED AT THE PLANT WILL REQUIRE SKILLS NOT CURRENTLY RESIDENT ON THE ISLAND AND THE ISLAND CAN LOOK FORWARD TO AN OVERALL INCREASE IN THE LEVEL OF SKILLS POSSESSED BY ITS WORKFORCE.

LITTON ANTICIPATES THAT, OVER THE FIVE YEAR PHASING-IN PERIOD, EMPLOYEES FROM ALL CATEGORIES WILL INCREASE AT ABOUT THE SAME RATE. OUR ESTIMATES OF EMPLOYMENT BY JOB CATEGORY REFLECT THIS AND ARE SHOWN IN TABLE 1. BASICALLY, WE ESTIMATE THAT THE DEMAND FOR WORKERS IN INDIVIDUAL JOB CATEGORIES WILL INCREASE PROPORTIONATELY UNTIL 345 WORKERS ARE EMPLOYED IN THE PLANT.

Wage Rates

On the basis of wage data shown in Table 2 and a figure we inserted for cafeteria staff, we estimate that the wage bill for year two of operations will be about $2.8 million and will rise steadily thereafter until final employment is reached. On the basis of current wage rates, the fully operating plant will have a wage bill in the sixth year of operations of just under ten million dollars.

The average wage rate for the plant is expected to be about $29,104 in current dollars. Litton told us, however, that initial wages may be lower until worker skills reach desired levels.

Litton also provides a benefits package which it feels to be at the top of industry standards. We did not, however, attempt to quantify the effect of the benefits package.

WE DID NOT INCLUDE THE SALARIES PAID TO ARMED FORCES PERSONNEL IN OUR CALCULATIONS BOTH BECAUSE WE DID NOT KNOW IF THEY WOULD BE ADDITIONAL TO ARMED FORCES PERSONNEL ALREADY ON THE ISLAND AND BECAUSE WE DID NOT HAVE A SALARY FIGURE FOR THAT GROUP.

LOCATION OF JOBS

A MAJOR PRIORITY OF THE GOVERNMENT OF PRINCE EDWARD ISLAND IS TO FOSTER THE "BALANCED" DEVELOPMENT OF THE ENTIRE ISLAND. IN LIGHT OF THIS PRIORITY, WE FELT IT IMPORTANT TO DETERMINE WHERE THE LIKELY EMPLOYEES OF THE PROPOSED LITTON PLANT WILL RESIDE.

Table 3

EMPLOYMENT IN VICINITY OF CHARLOTTETOWN
BY DRAW AREA

PLACE OF RESIDENCE	THOSE WORKING IN CHARLOTTETOWN AREA	PERCENTAGE	CUMULATIVE TOTALS
Central Area*	12,800	67%	67%
Inner Ring**	4,370	23%	90%
Outer Ring***	990	5%	95%
Rest of Island	1,050	5%	100%
	19,210	100%	

* The Central Area is defined as including Bunbury, Charlottetown, Cornwall, East Royalty, Hillsborough Park, Parkdale, Sherwood, Southport and West Royalty.

** The Inner Ring includes Townships 23 plus Hunter River, 24 plus North Rustico, 31, 32, 33, 34, 48, 49, and 65 Rocky Point.

*** The Outer Ring includes Townships 22, 29 plus Victoria and Crapaud, 30, 35, 35 (plus Scotchfort 4), 37 plus Mt. Stewart, 38 and 67.

The above locations were included because they were all within one-half hour driving time from Charlottetown and we used this as about the maximum time that Isalnders would wish to commute to work.

SOURCE: Statistics Canada 1981 Census

Table 4

EMPLOYMENT IN THE VICINITY OF CHARLOTTETOWN
BY COUNTY

COUNTY OF RESIDENCE	NUMBER WORKING IN CHARLOTTETOWN AREA	PERCENTAGE
QUEENS	18,300	95%
KINGS	575	3%
PRINCE	335	2%
TOTAL	19,210	100%

SOURCE: Statistics Canada 1981 Census

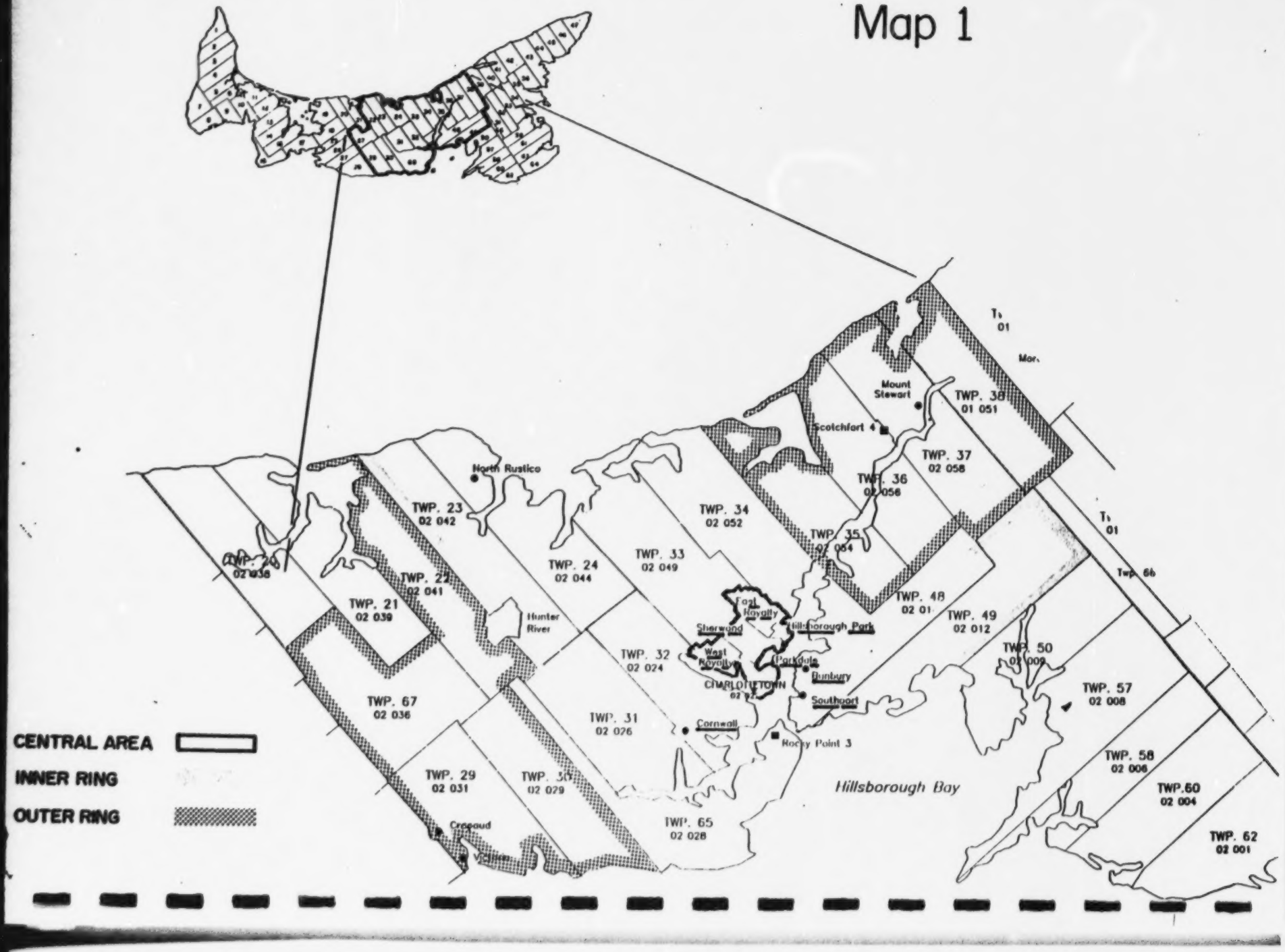
Methodology

To do this, we analyzed 1981 census data for the Island which shows where people work in relation to where they live. We have found no evidence that commuting patterns have changed greatly since this data was gathered and have, therefore, assumed that it provides a good estimate of percentages of people who live in one census area of the Island, but work in another.

Existing Employment Patterns

To show commuting patterns, we defined three "draw" areas. (Data for these areas is shown in Tables 3 and 4). All of these areas are within one-half hour of commuting time to the Charlottetown area. We understand that this is about the maximum time Islanders would consider driving to work.

Map 1


CENTRAL AREA
INNER RING
OUTER RING
TWP. 20
02 038
TWP. 23
02 042
North Rustico
TWP. 22
02 041
TWP. 21
02 039
TWP. 24
02 044
TWP. 33
02 049
TWP. 34
02 052
TWP. 35
02 054
TWP. 36
02 056
TWP. 37
02 058
Mount Stewart
Scotchfort
TWP. 38
01 051
Hunter River
TWP. 32
02 024
TWP. 31
02 026
TWP. 67
02 036
TWP. 29
02 031
TWP. 30
02 029
TWP. 65
02 028
Cornwall
Rocky Point 3
CHARLOTTETOWN
Sherwood
West Royalty
East Royalty
Hillsborough Park
Parkdale
Dunbury
Southport
TWP. 48
02 01
TWP. 49
02 012
TWP. 50
02 009
TWP. 57
02 008
TWP. 58
02 006
TWP.60
02 004
TWP. 62
02 001
Hillsborough Bay
Crapaud

The first "central area" includes Bunbury, Charlottetown, Cornwall, East Royalty, Hillsborough Park, Parkdale, Sherwood, Southport and West Royalty. About two-thirds of the people who work in the "central area" also live there.

Our "inner ring" includes Lots 23 plus Hunter River, 24 plus North Rustico, 31, 32, 33, 34, 48, 49 and 65 plus Rocky Point. About 23% of the people who work in the "central area" commute from these townships. When taken together, these two "draw" areas account for about 90% of those working in the vicinity of Charlottetown.

Our "outer ring" added Lots 22, 29 plus Victoria and Crapaud, 30,35, 36 plus Scotchfort, 4, 37 plus Mt. Stewart, 38 and 67. People who live in these areas account for about 5% of those who work in the Charlottetown area.

These three areas together supply about 95% of the workforce employed in the Charlottetown area. With the exception of Lot 38 all these areas are within Queens County. They do not, however, include of all that county.

Looking at this data by counties as a whole, we see that people living in Queens account for about 95% of those employed in the Charlottetown area. Only 3% of those working in the central area come from Kings while only 2% come from Prince.

Thus, provided that existing commuting patterns on the Island do not change, we would expect that those who will work at the Litton plant will live very near Charlottetown itself with most of the rest residing within Queens. Only a very small percentage of those employed at the plant will likely live outside Queens.

WE HAVE NOT INVESTIGATED WHETHER RESIDENTS OF OTHER PARTS OF THE ISLAND WOULD MOVE TO QUEENS, BUT THIS, OF COURSE, REMAINS A POSSIBILITY.

JOBS CREATED DUE TO THE PLANT

JOBS CREATED BY EMPLOYEE SPENDING

THE LITTON PLANT WILL CREATE JOBS ON THE ISLAND FOR ISLANDERS WHO ARE NOT WORKING AT THE PLANT. THE TOTAL NUMBER OF JOBS CREATED WILL DEPEND ON THE SPENDING OF THE LITTON EMPLOYEES ON GOODS AND SERVICES ON THE ISLAND AND THE PLANT'S PURCHASES OF MATERIALS AND BUSINESS SERVICES BY ISLAND FIRMS.

WE ESTIMATED ANNUAL JOB CREATION BY A METHOD WHICH SEPARATES THE IMPACT OF PLANT AND EMPLOYEE EXPENDITURES ON ISLAND EMPLOYMENT. WE ESTIMATED THE IMPACT OF EMPLOYEE SPENDING AS FOLLOWS.

Based on employment and wage data provided by Litton, we calculated annual direct employment and total wages. We used an average annual income of $29,104, and assumed $7,000 in exemptions and deductions to arrive at an average taxable income of $22,104. Based on 1985 tax rates, the average Litton worker would pay $6,192 in Federal and Provincial income tax.

Of the $22,912 in after tax income, the latest national data suggests that 10.2% will be saved. Thus we calculate that spending by each of the employees will, on average, be $20,575, or just over 70% of income.

The Statistics Canada Interprovincial Input-Output model estimates that, for each $10 million in consumer spending in 1979 by Prince Edward Island residents, 183 jobs would be created in the Province. Taking into account changes in the industry selling price index over the period, $10 million in consumer spending in 1985 would generate 124.9 jobs.

TABLE 5.

TOTAL JOB CREATION ESTIMATES

	YEAR					
	1	2	3	4	5	6
			(workers)			
Construction Employment	86					
Direct Plant Employment	13	100	197	271	320	345
Employee-Induced Effect	20	25	49	68	80	86
Employer-Induced Effect	17	28	55	70	72	75
Subtotal	37	53	104	138	152	161
Total Island Employment	**136**	**153**	**301**	**409**	**472**	**506**

We then multiplied total wages (in millions of 1985 dollars) paid by the Litton plant by the percentage of income spent (70.7) and this total by employment created per million dollars of household income (12.49).

The resulting annual job creation as a result of employee spending is shown in Table 5. The spending by each employee at the plant will, on average, create 0.25 jobs.

Jobs Created by Plant Expenditures

Our discussions with Litton revealed that almost none of the material inputs would be purchased locally. However, they expect to purchase approximately 20% of their business services and do 20% of their miscellaneous overhead spending on the Island. In our calculations of employment benefits due to plant spending, we have used Input-Output model data for 1979 which indicate that: each million dollars spent on business services generates 56.69 jobs; each million dollars spent on overhead items generates 23.19 jobs; and, each million dollars spent on electrical utilities generates 16.31 jobs.

We then deflated these figures based on the increase in the Statistics Canada industry selling price index from 1979 to 1985. The total spending estimates provided by Litton were based on 245 employees and $50 million in annual sales. For the build-up period, we scaled spending down by the ratio of actual employees to 245.

THE ADDITIONAL EMPLOYEES BEYOND 245 ARE PARTLY ENGAGED IN RESEARCH AND DEVELOPMENT, AND LITTON HAS TOLD US THAT IT WILL ONLY GENERATE ADDITIONAL SALES OF ABOUT $5 MILLION. WE SCALED THE PLANT'S SPENDING UPWARD BY THE RATIO OF ESTIMATED SALES TO FIFTY MILLION DOLLARS FOR THE YEARS WHERE EMPLOYMENT EXCEEDS 245. (HERE WE ASSUMED THAT SALES WOULD EXPAND LINEARLY WITH EMPLOYMENT AT A RATE OF $5 MILLION PER 100 EMPLOYEES.)

WE CALCULATE THAT AT 245 EMPLOYEES, THE $0.64 MILLION (20% OF $3.2 MILLION) SPENT ON BUSINESS SERVICES GENERATES 23 ADDITIONAL JOBS ON THE ISLAND. THE $2.26 MILLION (20% OF $11.3 MILLION) OF MISCELLANEOUS OVERHEAD EXPENDITURES CREATES 33 JOBS. THE $0.7 MILLION IN ELECTRICITY OVERHEAD SPENDING WILL CREATE 7 NEW JOBS. THUS, IN TOTAL, WHEN THE PLANT IS OPERATING AT 245 EMPLOYEES AND $50 MILLION SALES ITS SPENDING WILL CREATE 63 ADDITIONAL JOBS. EMPLOYEE INDUCED SPENDING WILL ADD AN ADDITIONAL 61 JOBS. OVERALL, 124 JOBS OUTSIDE THE PLANT WILL BE CREATED, FOR A TOTAL OF 369 JOBS.

Total Jobs Created Outside the Plant

Our calculations for the total number of jobs created outside the plant are shown in Table 5. During the first year of operations of the plant, 37 additional jobs will be created. For the second year the figure is 53, for the third the figure is 104, for the fourth it is 138, and for the fifth it is 132. Once the plant is operating with 345 employees at the end of year five, 161 additional jobs will be created.

Overall Job Creation

Our overall estimates for job creation on the Island are shown in Table 5. They show that, for each job created in the plant, roughly 0.5 additional jobs would be created on the Island.

WHILE SUCH BENEFITS ARE CONSIDERABLE, THEY ARE SOMEWHAT SMALLER THAN ESTIMATES WHICH ARE CURRENTLY IN FRONT OF YOU. WE BELIEVE THAT YOUR CURRENT UNDERSTANDING IS THAT, WHEN 245 JOBS ARE CREATED AT THE END OF YEAR THREE, A FURTHER 427 JOBS WILL BE CREATED -- FOR A TOTAL OF 672 NEW JOBS.

OUR ESTIMATES SHOW THAT 245 JOBS AT THE PLANT WILL CREATE A FURTHER 124 JOBS -- FOR A TOTAL OF 369 JOBS. IF OUR FIGURES ARE CORRECT, THEN THE BENEFITS THAT YOU SHOULD EXPECT TO RECEIVE WILL BE REDUCED BY ABOUT ONE-HALF. APPROXIMATELY THE SAME RATIO WOULD APPLY WHEN THE PLANT REACHES AN EMPLOYMENT LEVEL OF 345 PEOPLE.

METHODOLOGY CHECK

THESE ESTIMATES FOR OVERALL JOB CREATION ARE SIGNFICANTLY LOWER THAN THE ONES YOU ARE CURRENTLY USING. THIS IS SO FOR A NUMBER OF REASONS. FIRST, BASED ON NEW INFORMATION OBTAINED FROM LITTON, OUR ASSUMPTIONS PLACE SIGNIFICANTLY LESS OF THE PLANT'S NON-WAGE SPENDING IN PRINCE EDWARD ISLAND. SECOND, WE USED GENERAL PROVINCIAL MULTIPLIERS PUBLISHED BY STATISTICS CANADA INSTEAD OF A CUSTOM SIMULATION BY THE INPUT-OUTPUT MODEL AS USED BY COOPERS AND LYBRAND. THIRD, WE USED INDIVIDUAL WAGE RATES AND EMPLOYMENT ESTIMATES PROVIDED BY LITTON, RATHER THAN AGGREGATE WAGE BILL FIGURES.

We checked the consistency of our results by using our methodology for Litton production impacts while retaining the same assumptions that Coopers and Lybrand use in their study. The result was an estimate of 417 additional jobs created by employee and plant non-wage expenditures in year 6. The resulting estimate was 14 percent lower than that arrived by Coopers and Lybrand.

We can interpret the unexplained difference of 14 percent as one of methodology, and as such can add it to our results as a confidence band. We took the approach we did because it enabled us to isolate the jobs created by spending by Litton employees from the less certain jobs induced by Litton's projected purchases on the Island. We also have adjusted annual spending figures in accordance with the level of activity at the plant.

THUS, THE MAJOR DIFFERENCE BETWEEN OUR ESTIMATES AND THOSE YOU ARE CURRENTLY USING ARE DUE ALMOST ENTIRELY TO DIFFERENCES IN ASSUMPTIONS AND IS NOT DUE TO THE METHOD WE ARE USING. IN PARTICULAR, THESE ASSUMPTIONS CONCERN THE LOCATION OF LITTON'S SPENDING. OF PARTICULAR SIGNIFICANCE IS THE SPENDING ON OVERHEAD AND BUSINESS SERVICES. WE UNDERSTAND THAT COOPERS WAS TOLD THAT 100 PERCENT OF THESE PURCHASES WOULD BE MADE ON THE ISLAND. WE INVESTIGATED THIS IN SOME DEPTH AND WERE TOLD BY LITTON THAT ONLY ABOUT 20% OF THESE PURCHASES WOULD, IN FACT, BE MADE ON THE ISLAND. BECAUSE OF ITS IMPORTANCE (A DIFFERENCE OF ROUGHLY 300 JOBS) WE CHECKED AND RECHECKED THIS WITH LITTON.

QUALIFICATIONS TO JOB CREATION ESTIMATES

WHILE WE FEEL THAT THE ABOVE ESTIMATES GIVE AS ACCURATE A PICTURE OF THE IMPACT OF THE LITTON PLANT AS IS POSSIBLE WITH AVAILABLE DATA, THERE ARE A NUMBER OF FACTORS WHICH COULD LEAD TO A DIVERGENCE OF THE ACTUAL JOB CREATION FIGURES FROM OUR ESTIMATES.

ON THE POSITIVE SIDE, JOB CREATION WOULD BE HIGHER IF:

- MORE JOBS ARE CREATED IN THE LITTON PLANT DUE TO INCREASED DEMAND FOR ITS PRODUCTS.
- IN FUTURE YEARS, FIRMS PRODUCING MATERIALS FOR THE PLANT DECIDE TO LOCATE IN P.E.I.
- EMPLOYEES AT THE PLANT GAIN EXPERIENCE AND, AS A RESULT, SET UP THEIR OWN BUSINESSES ON THE ISLAND.

ON THE NEGATIVE SIDE, THESE ESTIMATES COULD EXCEED ACTUAL JOB CREATION IF:

- WORKERS HIRED BY THE PLANT WERE PREVIOUSLY RECEIVING UNEMPLOYMENT INSURANCE BENEFITS. THIS REDUCTION IN INCOME FLOW TO THE ISLAND WOULD HAVE TO BE SET AGAINST THE WAGES BEING PAID TO ISLANDERS.

- ISLANDERS SPEND A PORTION OF THEIR WAGES ON GOODS AND SERVICES OFF THE ISLAND. THE ESTIMATES ASSUME THAT ALL THE INCOME OF WORKERS THAT IS SPENT, IS SPENT ON THE ISLAND. WHILE WE KNOW THAT OFTEN SUCH ITEMS AS CLOTHES AND CARS ARE BOUGHT OFF THE ISLAND, WE HAD NO WAY OF ACCURATELY ESTIMATING THE EXTENT OF SUCH PURCHASES.
- ONLY CURRENTLY EMPLOYED PEOPLE ARE INVOLVED. THESE JOB ESTIMATES ASSUME THAT NEW EMPLOYEES WILL BE DRAWN, EITHER DIRECTLY OR INDIRECTLY, FROM THE RANKS OF THE UNEMPLOYED. TO THE EXTENT THAT ONLY CURRENTLY EMPLOYED PEOPLE ARE INVOLVED, THE TOTAL SPIN-OFF BENEFITS WILL BE REDUCED.

POTENTIAL TO ATTRACT OTHER FIRMS

WHILE THE LITTON PLANT WILL BE LARGE BY ISLAND STANDARDS, IT IS RELATIVELY SMALL IN COMPARISON TO PLANTS LOCATED IN THE MAJOR INDUSTRIAL CENTRES LOCATED IN OTHER PARTS OF CANADA AND ABROAD. THIS LEADS US TO THINK THAT IN THE ABSENCE OF OTHER SIMILAR INITIATIVES TO ATTRACT FIRMS TO THE ISLAND, MARKET FORCES CANNOT BE EXPECTED TO RESULT IN THE MOVEMENT OF OTHER INDUSTRIAL PLANTS TO THE ISLAND IN ORDER TO PROVIDE INPUTS TO THE LITTON PLANT.

THIS CONCLUSION IS REINFORCED BY DISCUSSIONS WITH LITTON WHICH REVEALED THAT THEIR ANTICIPATED PURCHASES OF GOODS AND SERVICES COVERED A WIDE RANGE OF PRODUCTS. FURTHER, WE UNDERSTAND THAT NO ONE PRODUCT NEEDED IS EITHER SO SPECIFIC TO THIS PALNT OR REQUIRED IN SUCH QUANTITIES THAT IT WILL INDUCE ITS MANUFACTURER TO MOVE HIS OPERATIONS TO THE ISLAND.

THIS IS NOT TO SAY THAT AN OVERALL INDUSTRIAL STRATEGY COULD NOT BE BUILT AROUND ACQUIRING A NUMBER OF INDUSTRIAL ENTERPRISES WHICH WOULD IN DUE COURSE, RESULT IN A

SUFFICIENTLY LARGE INDUSTRIAL BASE THAT THE ISLAND WOULD BECOME MORE ATTRACTIVE TO OTHER FIRMS.

NOR IS IT TO SAY THAT THE PRESENCE OF THE LITTON PLANT WOULD NOT BE A POSITIVE FEATURE TO ANOTHER EMPLOYER IF HE WERE BEING OFFERED GOVERNMENT INCENTIVES TO LOCATE ON THE ISLAND.

WHAT WE ARE SAYING IS THAT YOU SHOULD NOT COUNT ON THE PRESENCE OF THE LITTON PLANT ATTRACTING FURTHER INDUSTRY ON ITS OWN. THUS, IN DECIDING HOW MUCH YOU ARE PREPARED TO PAY FOR LITTON TO COME TO THE ISLAND, THIS FACTER SHOULD NOT ADD TO YOUR COSTS.

COSTS AND RISKS TO THE ISLAND

WAGE RATE IMPLICATIONS

THE EMPLOYMENT LEVELS PROJECTED BY LITTON, WHEN COMPARED WITH THOSE OF OTHER FIRMS LOCATED IN THE SAME AREA, MEAN THAT

Table 6

Wage Rate Comparison (including benefits)
($ per hour)

	PEI SURVEY (1984)	LITTON ESTIMATE (1985)
Assembly	$7.00 - 9.00	$13.01
Test & Buy Off	$7.00 - 9.00	$16.57
Quality Assurance	$7.00 - 9.00	$13.69
Manufacturing, Sustaining and Quality Engineers	$12.41 - 21.00	$18.59 - 22.73
Assembly Test & Rework	$7.00 - 9.00	$14.14
Machine Shop	$11.25 - 12.00	$14.21
Indirect Support	$7.20 - 20.02	$16.57

Source: Litton System
Government of P.E.I.

WAGES PAID BY LITTON COULD IMPACT ON THE OVERALL WAGE STRUCTURE. THE 1983 CENSUS OF MANUFACTURERS SHOWS THAT THERE WERE 140 MANUFACTURING FIRMS ON THE ISLAND. OF THESE, 47 WERE IN FOOD AND BEVERAGE INDUSTRIES. TOTAL EMPLOYMENT IN THE MANUFACTURING INDUSTRY WAS GIVEN AS 3,061, OF WHICH 60% WORKED IN FOOD AND BEVERAGES INDUSTRIES.

THERE WERE 93 FIRMS IN NON-FOOD AND BEVERAGE INDUSTRIES. THESE FIRMS EMPLOYED 1,224 PEOPLE, OR AN AVERAGE OF JUST OVER 13 EMPLOYEES. THE LARGEST NON-FOOD AND BEVERAGE MANUFACTURING FIRM CURRENTLY EMPLOYS 95 PEOPLE AT THE INDUSTRIAL PARK. THE OTHER 15 FIRMS LOCATED AT THE PARK EMPLOY AN AVERAGE OF 13 PEOPLE. CURRENTLY 219 MALES AND 64 FEMALES ARE EMPLOYED AT THE PARK.

TO TEST WHETHER THE EXISTENCE OF THE LITTON PLANT WOULD, IN FACT, BID UP WAGES, WE COMPARED THE WAGE RATES THAT LITTON IS CONTEMPLATING WITH WAGE RATES FOR SIMILAR OCCUPATION CATEGORIES CURRENTLY BEING PAID ON THE ISLAND.

THIS COMPARISON, SHOWN IN TABLE 6, INDICATES THAT, FOR MANY CATEGORIES, LITTON'S RATE IS CONSIDERABLY HIGHER THAN EXISTING RATES. FOR EXAMPLE, ASSEMBLY WORKERS ARE CURRENTLY BEING PAID BETWEEN $7.00 AND $9.00 PER HOUR. LITTON INTENDS

TO PAY $13.00 PER HOUR. MACHINE SHOP WORKERS WILL RECEIVE AT LEAST 20% MORE THAN THEY CURRENTLY DO.

WE SPOKE WITH LITTON ABOUT THEIR COMPENSATION POLICY. THEY TOLD US THAT IT WAS THEIR POLICY TO PAY A PREMIUM OVER AVERAGE RATES OF ABOUT 10%. THEY DO THIS IN ORDER TO ENSURE THAT THEY CAN HIRE TOP QUALITY WORKERS, WHO ARE COMMITTED TO THEIR JOB, ARE PRODUCTIVE AND HAVE GOOD WORK HABITS.

AS THE EFFECTIVE PREMIUM THEY WILL BE PAYING APPEARS TO BE MUCH MORE THAN THIS, WE CONFIRMED BOTH CURRENT RATES PAID AND LITTON'S ESTIMATES. ONE POSSIBLE EXPLANATION FOR THIS IS THAT THE SKILLS REQUIRED BY WORKERS PLACE THEM RIGHT AT THE TOP OF THE CATEGORIES SHOWN. THUS, THE COMPARISON MADE MAY NOT BE STRICTLY APPROPRIATE. HOWEVER, THIS DOES NOT ALTER THE BASIC FACT THAT WORKERS, WHO CAN DEVELOP THE NECESSARY SKILLS, WILL HAVE AN OPPORTUNITY TO MAKE CONSIDERABLY MORE MONEY AT THE LITTON PLANT THAN THEY CURRENTLY DO.

COMPETITIVENESS

In an effort to retain their best workers, other manufacturing firms on the Island may be under pressure to bid up the wages of their employees. While it is beyond the scope of this study, it will be important to find out whether such firms could increase their wage bill and still remain competitive.

VIABILITY OF LITTON PLANT

Perhaps the major question the Island faces in deciding whether to proceed with an agreement to have Litton Systems construct and operate a plant on the Island is whether such a plant will be viable in the long term. The social and economic implications of having what would be, by far, the largest non-food manufacturing facility on the Island close down are clearly considerable. Further, such events have happened before in the Maritime provinces.

THE LONG-TERM VIABILITY OF THIS PLANT RESTS LARGELY ON ITS ABILITY TO CAPTURE EXPORT ORDERS FOR BOTH THE ADATS PRODUCT AND OTHER RADAR-RELATED PRODUCTS WHICH LITTON INTENDS TO PRODUCE AT THE PLANT. THIS, IN TURN, WILL DEPEND ON THE ABILITY OF LITTON TO REMAIN A COMPETITIVE PRODUCER OF STATE-OF-THE-ART SYSTEMS AND ON THE ABILITY OF THIS PLANT TO PRODUCE THOSE PRODUCTS IN A COST-COMPETITIVE MANNER.

CANADIAN ORDER

THE REASON FOR THE CONSTRUCTION OF THE PLANT, IN THE FIRST PLACE, IS TO FILL A CANADIAN GOVERNMENT ORDER FOR ABOUT 40 UNITS. THIS ORDER WILL ONLY BE LARGE ENOUGH TO KEEP THE PLANT OCCUPIED FOR THE FIRST ONE OR TWO YEARS. AND, SINCE IT IS NOT LIKELY THAT THERE WILL FOLLOW-UP ORDERS FROM CANADA IN THE NEAR FUTURE, EXPORT SALES WILL HAVE TO PROVIDE THE SUBSEQUENT ORDER BASE FOR THE PLANT.

THERE APPEAR TO BE THREE REASONS FOR THE CONSTRUCTION OF AN $18 MILLION PLANT TO PRODUCE ONE TO TWO YEARS OUTPUT. FIRST, CANADA IS THE INITIAL CUSTOMER FOR THE ADATS SYSTEM AND, IN LINE WITH NORMAL BUSINESS PRACTICE, OERLIKON-BUHRLE IS PREPARED TO DO MUCH MORE FOR SUCH A START-UP CUSTOMER THAN IT WOULD BE PREPARED TO DO FOR A COUNTRY WHICH WISHED TO PURCHASE THE SYSTEM AT A LATER DATE. LITTON NOW HAS THE OPPORTUNITY TO PARTICIPATE IN THE PRODUCTION OF THE SYSTEM FOR THE WORLD MARKET AND THIS IS CLEARLY OF GREAT POTENTIAL BENEFIT TO THEM.

SECOND, CANADIAN GOVERNMENT POLICY ON MAJOR CAPITAL PURCHASES REQUIRES THAT OFFSETS BE GENERATED FOR CANADIAN INDUSTRY. THUS ANY SUPPLIER WISHING TO SELL SUCH ITEMS TO THE GOVERNMENT MUST OFFER TO PRODUCE AT LEAST PART OF IT IN CANADA.

FINALLY, WE UNDERSTAND THAT SWITZERLAND IS QUITE HAPPY TO SEE THE ADATS SYSTEM PRODUCED OFFSHORE.

THIS SITUATION AT ONCE CREATES OPPORTUNITIES AND RISKS FOR THE ISLAND. ON THE POSITIVE SIDE, IT IS AN OPPORTUNITY TO PARTICIPATE IN THE PRODUCTION OF A STATE-OF-THE-ART PRODUCT WHICH, ITS MANUFACTURERS CLAIM, HAS CONSIDERABLE EXPORT MARKET POTENTIAL. HOWEVER, THE FACT THAT THIS OPPORTUNITY HAS BEEN CREATED, IN PART, BY THE USE OF GOVERNMENT INCENTIVES MEANS THAT THE PLANT WOULD NOT LIKELY HAVE BEEN LOCATED ON THE ISLAND WERE THE DECISION TAKEN ON STRICTLY ECONOMIC GROUNDS.

OFFSET POLICY IS PREDICATED ON THE ARGUMENT THAT, ONCE AN INDUSTRY IS LOCATED IN AN AREA, IT MAY BEGIN TO PROSPER ON ITS OWN. IN REALITY, THERE ARE EXAMPLES OF SUCCESSFUL INDUSTRIES WHICH HAVE THEIR ORIGIN IN OFFSET POLICY. THERE ARE OTHERS, HOWEVER, WHICH HAVE NOT BECOME VIABLE.

Exports

Data we have been given by Litton indicate that an overall world market for some 3,000 units exists between now and the year 2020. Oerlikon-Buhrle expects to capture about 30% of this market. The next two potential buyers appear to be Turkey and the U.S.A., with the latter having a requirement of over 300 units. If their expectations are realized, average orders for about 30 units per year could be expected by the plant. At a production rate of about 4 per month, the plant would be employed for between seven and eight months of the year.

EVEN IF THE EXPORT ORDERS ARE RECEIVED, IT IS STILL POSSIBLE THAT THE PRINCE EDWARD ISLAND PLANT WILL NOT PARTICIPATE IN ITS PRODUCTION. THIS POSSIBILITY EXISTS BECAUSE CANADA IS NOT THE ONLY COUNTRY WHICH HAS OFFSET REQUIREMENTS. THUS, ANOTHER BUYER MAY ALSO DEMAND THAT HIS PURCHASE IS OFFSET BY PRODUCTION IN HIS COUNTRY. THERE ARE MANY WAYS OF RESPONDING TO SUCH A REQUIREMENT AND ONE POSSIBILITY IS THAT THE COMPONENTS CURRENTLY PRODUCED ON THE ISLAND WILL BE ALLOCATED TO OVERSEAS PRODUCTION. THERE DOES NOT APPEAR TO BE ANY TECHNICAL REASON WHY THIS COULD NOT HAPPEN SINCE, IF A PLANT CAN BE SET UP ON THE ISLAND IN ONE YEAR, IT CAN BE SET UP ELSEWHERE AS WELL.

Other Radar Equipment

To complement the ADATS system, Litton is proposing to move its other radar operations to the Island. It is a line that they are well-established in and are committed to. However, their sales of these products are not large and are currently in the order of $5 million annually. If this work continues at such a level, it can only be expected to contribute to a small degree to the stability of overall plant employment.

GUARANTEE BY LITTON

The market prospects facing the plant, as detailed above, indicate an opportunity for good export sales and a viable future. There are, however, important risks to be faced.

In light of these risks, the commitment by Litton that the plant will operate for at least ten to fifteen years becomes very important. The contents of the guarantee can assist in the creation and maintenance of a viable industry on the Island. Ideally, the provisions of the guarantee should parallel and build on those given to the Federal Government by Oerlikon-Litton. The difficulty is that negotiations are still underway and it will not likely be possible to examine the industrial benefit guarantees at this time. We were told, however, that some details would be released when the final contract is signed. We were also told that it may be possible for the Government of Prince Edward Island to become privy to some more contract information on a Government-to-Government basis. Both of these sources may be of some help to Prince Edward Island in its negotiations with Litton.

BEYOND THE GUARANTEE

WHEN THE GUARANTEE PERIOD RUNS OUT, THE ONLY REASONS FOR LITTON TO KEEP THE PLANT OPEN WILL BE: IF IT PRODUCES A PRODUCT FOR WHICH THERE IS A MARKET; IF IT IS AN EFFICIENT, WELL-RUN AND COST-EFFECTIVE PLANT; AND, IF THE PLANT HAS BECOME A FULLY INTEGRATED PART OF LITTON'S OPERATIONS. THUS, THE RELATIONSHIP DEVELOPED BETWEEN LITTON AND THE ISLAND OVER THE PERIOD OF THE GUARANTEE, TOGETHER WITH THE PROVISIONS OF THE GUARANTEE ITSELF SHOULD BE TARGETED TOWARDS THE ABOVE GOALS.

DIRECT COSTS TO PRINCE EDWARD ISLAND

WE UNDERSTAND THE ISLAND HAS PROPOSED THAT DISCUSSIONS TAKE PLACE BETWEEN LITTON-OERLIKON AND THE PROVINCE. THE PURPOSE WOULD BE TO EVOLVE A MIX OF INCENTIVES WHICH WILL AGGREGATE TO $9 MILLION IN PUBLIC SUPPORT.

We were concerned to find out why a Federal initiative to bring work to the Maritimes had resulted in a situation where the Maritime Province, which won the work, had to spend $9 million to get it. While we have not been able to confirm this with the Quebec Government, we understand that the major assembly plant in Quebec did not cost that province anything.

Our research provided us with the following information. First, the Federal Government request for proposals contained a section dealing with socio-economic benefits. We were told that the purpose of this section was to foster regional economic development outside the main industrialized areas of Canada. It was, however, not intended to result in a situation whereby the Province, which secured the work, would have to pay for it. It is generally regarded by Federal officials as "unfortunate" that Prince Edward Island will have to pay to have a Litton plant located on the Island.

LITTON-OERLIKON RESPONDED TO THE REQUEST FOR PROPOSALS WITH A PLAN TO LOCATE A MANUFACTURING OPERATION IN THE MARITIMES. HAVING DONE THIS, THEY THEN ASKED THE MARITIME PROVINCES HOW EACH WOULD SUPPORT THE CREATION OF SUCH A FACILITY IN THEIR PROVINCE. LITTON TOLD US THAT THEY DID NOT SPECIFICALLY ASK FOR CASH SUPPORT.

AS WE UNDERSTAND IT, THE $9 MILLION FIGURE RESULTED FROM A COMPETITION AMONG THE MARITIME PROVINCES TO GET THE PLANT. THE $9 MILLION DOES NOT SEEM TO HAVE BEEN BUILT IN TO THE OVERALL CONTRACT PRICE. IF THIS IS SO, IT IS A WINDFALL GAIN TO THE SUPPLIERS.